Navy Data Environment (NDE)
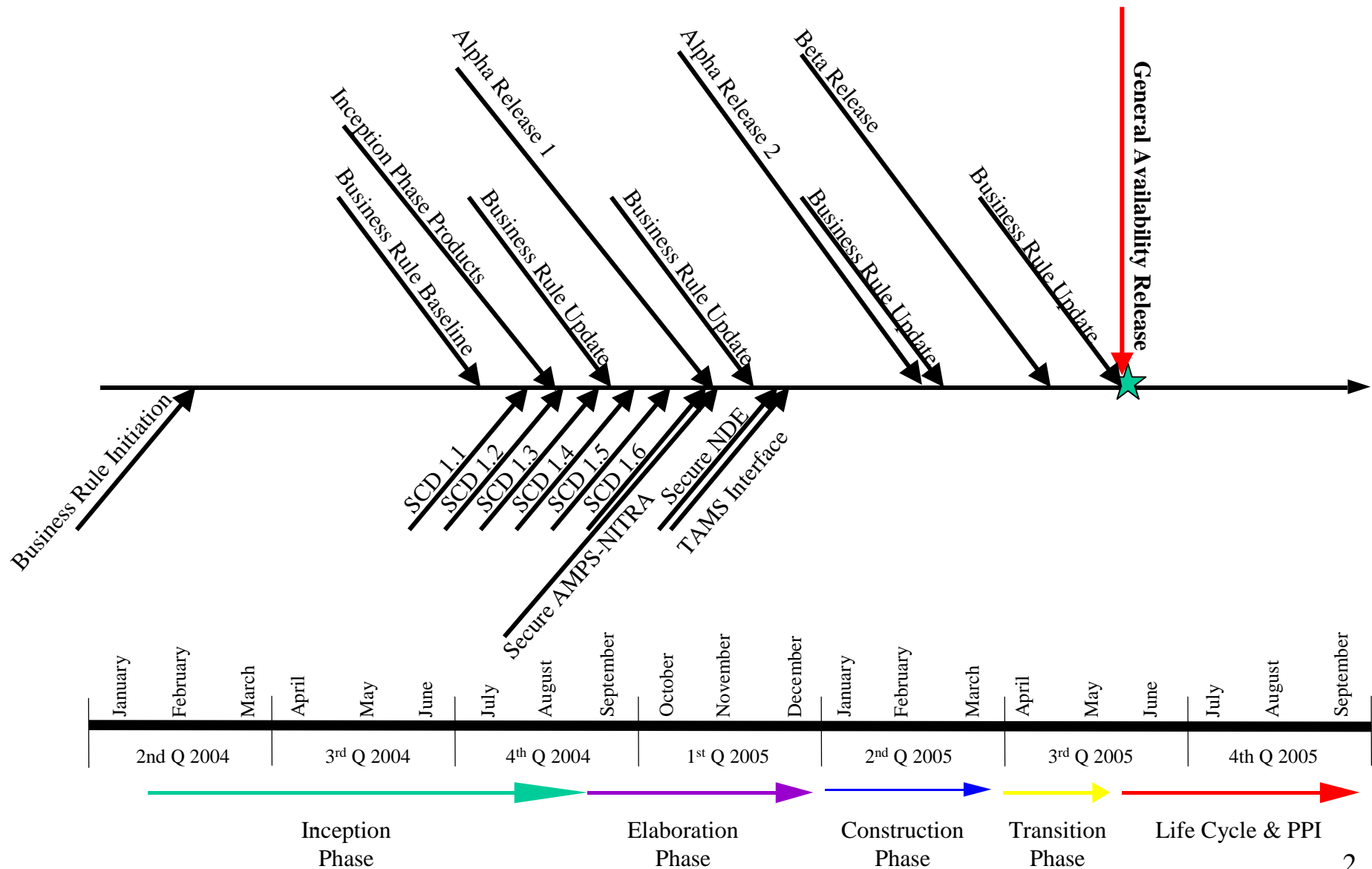
Navy Modernization (NM)

SHIPMAIN Entitled Process

Program Review # 4

October 2004

NDE NM Entitled Process Time Line

2

Navy Modernization State

NDE

NM

NDE-SPF

AMPS

LOGISTICS (FMPMIS/AIPS)

PROGRAM & EXECUTION

Candidate For Change (CFC)

CDMD-OA

Ship Change Document (SCD)

ILS/MASTER LIST

SPIDER

Database

REPLICATION

NTIRA

HMS PY

Non-CNO AVAIL DATA

ISEA PLANNING

AUTODOC

ICP PRISM

LCRS-FMP

3
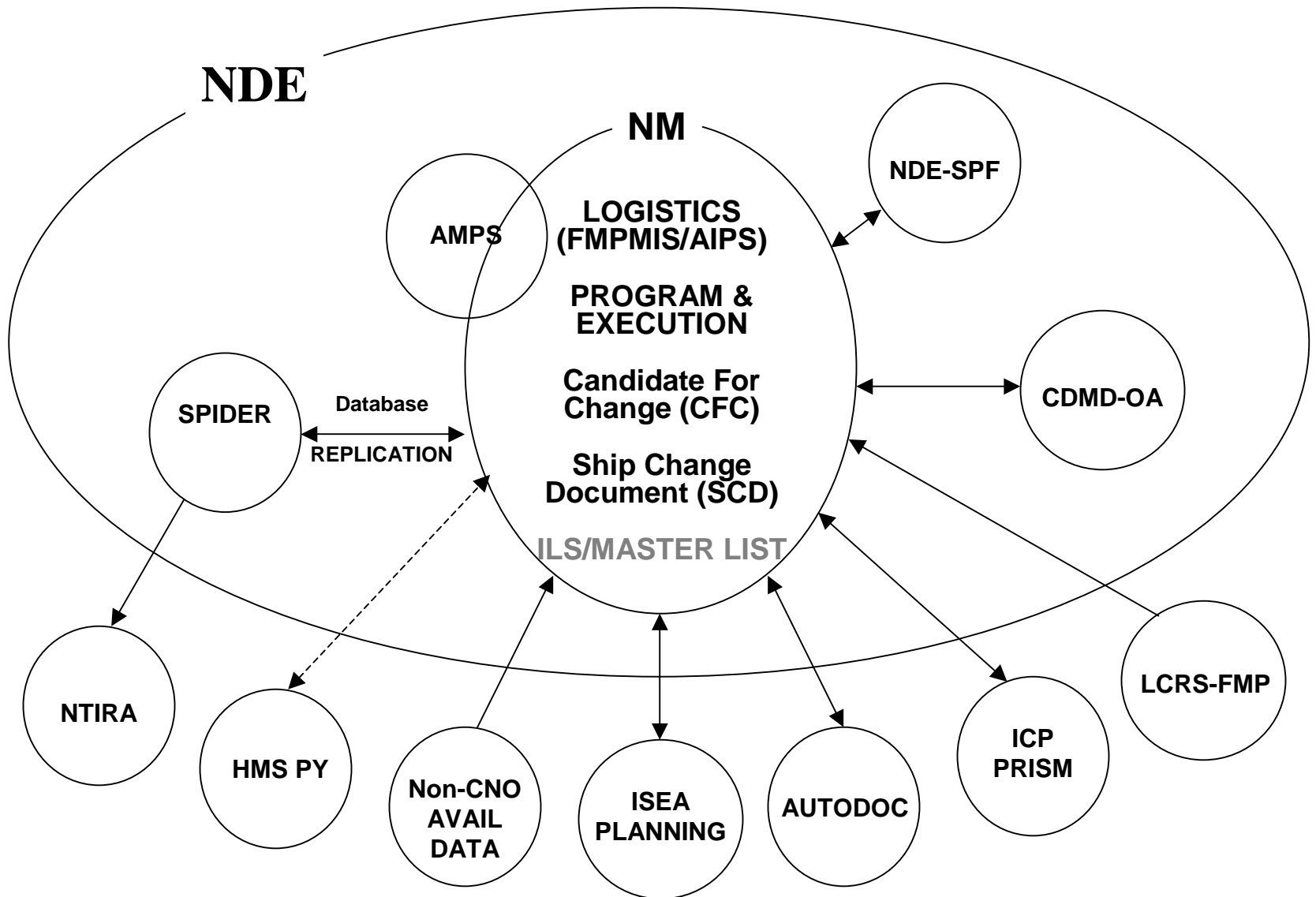
SCD – Release 1.4

	SCHED.	REVISED	ACTUAL
Enhance Email Notification Processes	9/09/04	9/21/04	9/21/04
Revisions to subject line			
Revision to "To" & "CC"			
Add SPM Comment Field	9/10/04		9/10/04
SCD Status - Pull-downs by Phase	9/15/04		9/07/04
Change Ad Hoc Default Field Display	9/16/04		9/16/04
Add Sponsor Role / RCP Functionality	9/20/04		9/20/04
Enhance some Filtering capabilities (e.g. Browse by Class, Ship)	9/24/04		9/15/04
Switch to new POC Pick Lists (TYCOM, PARM, TECH)	9/24/04	9/27/04	9/27/04
Allow user entry of POC information on SCD Recs			
CBA Spreadsheet Changes (Man-day rates)	9/27/04		9/27/04
Add MDA as Appropriations Type (no BLI)	9/27/04		9/23/04

SCD – Release 1.4 (cont.)

	SCHED.	REVISED	ACTUAL
Enhanced Help Pages	9/16/04		9/16/04
Provide capability for user to send SCD back to submitter (TAT CM, SPM, AFOM, CBA)	9/20/04		9/23/04
Modifications to the RCP form			
Add Comment fields	9/20/04		9/24/04
Modification to Funding in Modernization Plan	9/20/04		10/04/04
Adding Statement on record in CFC/PA	9/20/04		9/24/04
Release to Test/Testing	9/28/04	10/04/04	10/05/04
Release to Production	10/01/04	10/08/04	10/08/04

Ship Change Document (2 of 4)

SCD – Release 1.5

	SCHED.	REVISED	ACTUAL
Automate Resource Sponsor notification of SCD/RCP	10/10/04		10/08/04
Add the 06 Vote process to SCD	10/10/04		10/08/04
Add the 06 Vote tally notification to SCD	10/10/04		10/08/04
Automate the 06 Vote Notification to RCP	10/10/04		10/08/04
Provide browse capability for 06 Vote Process	10/10/04		10/08/04
Provide capability for Submitter to move SCDs to history - with mandatory comments (Ph#1)	10/10/04		10/07/04
Release to test/testing	10/12/04		10/12/04
Release to production	10/14/04		

Ship Change Document (2 of 4)

SCD – Release 1.6

	SCHED.	REVISED	ACTUAL
Create Export of RCP for 1/2 and 3 star voting	10/17/04		
Change RCP to display whole number percentiles & label as such	10/19/04		
Release to test/testing	10/20/04		
Release to production	10/26/04		

SHIP CHANGE DOCUMENT

- **Business Process Changes**
  - SCD is Prototype – Requirements change on a routine basis
- **Resources**
  - Resources sufficient for approved SCD requirements development
- **Funding to Complete**
  - Funding provided
- **Risks**
  - Detailed requirements and associated documentation, still evolving
- **Critical Path**
  - Timely identification and inclusion of the Resource Sponsor funding commitment, 06 Voting Process, expansion of the RCP, capability to export 06 Voting Board results to identify problem areas for presentation to the 1 & 2 and 3 Star Admiral Voting Boards.
- **Risk Mitigation**
  - Working with SHIPMAIN Team Leads weekly on changing requirements

Secure NDE-NM Environment

Establish Secure Operations

	SCHED	REVISED	ACTUAL
Submit RFS to DISA	3/17/04	3/17/04	3/17/04
Build secure area	3/26/04	4/22/04	4/22/04
Obtain Security Approval for physical space	4/9/04	5/07/04	5/7/04
Obtain SIPRNET Connection	7/23/04	9/22/04	9/22/04**
Develop SOP, Risk, Security Documentation	7/02/04	10/29/04	Caution
Receive SIPRNET Approval	7/2/04	11/15/04	Caution
Modify Un-Class Application for Class	7/2/04	12/15/04	On target
Hardware/Software (Procure/Install/Conf.)	8/2/04	10/30/04	On target
Cross Domain Capability - Auto Info.Transfer	9/30/04	12/29/04	Caution
Operational	8/2/04	12/26/04	Caution
Secure AMPS - NTIRA Interface (2-way)	8/6/04	12/15/04	Caution

TAMS Interface

	SCHED	REVISED	ACTUAL
TAMS Interface	9/10/04	01/28/05	Caution

Notes: ** Installation completed. Still need encryption setup, testing and documentation approved before it can be turned on

Secure NDE-NM Environment

- **Business Process Changes**
  - **None**
- **Resources**
  - Programmers in place
  - HW still being delivered/installed
- **Funding to Complete**
  - Funding provided
- **Risks**
  - Sequential series of events – impacts on other events
  - DISA SIPRNET approval timeframe (standard advertised as 150 days)
  - Cannot start operations until approvals are in place.
- **Critical Path**
  - Installation of SIPRNET line / CRYPTO gear (Still not installed)
  - Security Accreditation
  - DISA approval
- **Risk Mitigation**
  - Apply sufficient/focused project management attention to facilitate movement through DISA process

Overall Entitled Process Integration

- Must have a sound transition plan
  - Items to be considered:
    - Moving Candidate for Change (CFCs) & SCDs to real Alterations
    - Processing of existing approved (Legacy) Alterations in NDE-NM
    - Modification needed to Legacy Applications (e.g. Alt Identifier change)
    - Impacts on existing Business Rules for processing current Alterations types (e.g. ORDALTS, SHIPALTS, ECs, FCs)
    - Impacts on existing Legacy Application Process flows (Funding, Execution, Material, etc.)

Software Development

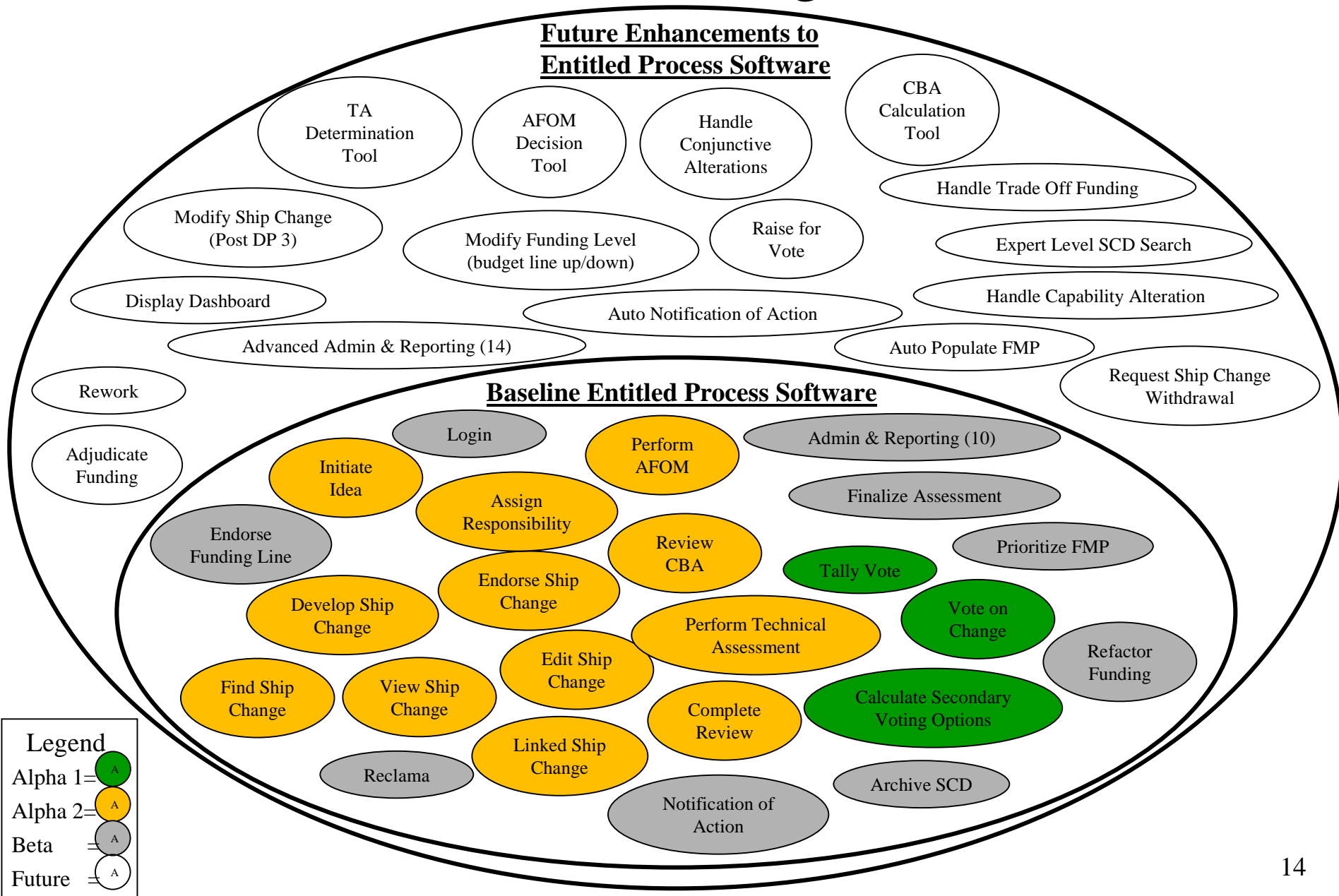|	Orig	PR3	PR 4	ACTUAL
Inception Phase				
• Navy Approval of Inception Phase Products	9/1/04	9/1/04	9/1/04	**9/1/04**
Elaboration Phase				
• Alpha 1 SME Inputs to ASC	9/27/04	NEW	10/01/04	**10/01/04**
• Alpha 1 Requirements to NSLC	10/04/04	NEW	10/08/04	**10/8/04**
• Alpha 1 Software Release	11/08/04	11/08/04	11/08/04	**At Risk**
• Alpha 2 SME Inputs to ASC	11/23/04	NEW	1/21/05	**On Target**
• Alpha 2 Requirements to NSLC	12/4/04	NEW	1/28/05	**Caution**
• Alpha 2 Software Release	1/10/05	1/10/05	2/25/05	**At Risk**
• Elaboration Phase Product Delivery	11/29/04	11/29/04	2/27/05	**On Target**
• Entitled Process Business Rule Update	11/29/04	11/29/04	2/27/05	**On Target**
• Navy Approval Elaboration Phase Products	12/13/04	12/13/04	3/20/05	**On Target**
Construction Phase				
• Beta SME Inputs to ASC	2/14/05	NEW	3/23/05	**On Target**
• Beta Requirements to NSLC	2/21/05	NEW	4/1/05	**Caution**
• Beta Software Release	3/21/05	3/21/05	4/29/05	**At Risk**
• Construction Phase Product Delivery	3/17/05	3/17/05	5/6/05	**On Target**
• Navy Approval Construction Phase Products	12/13/04	12/13/05	5/27/05	**On Target**
Transition Phase				
• General Availability SME Inputs to ASC	3/04/05	NEW	5/13/05	**On Target**
• General Availability Requirements to NSLC	3/11/05	NEW	5/20/05	**Caution**
• General Availability Software Release	4/11/05	4/11/05	6/3/05	**At Risk**
• Entitled Process Business Rule Update	4/11/05	4/11/05	6/10/05	**On Target**

Use Case General Venn Diagram

Future Enhancements to Entitled Process Software

Expert Tool Functionality (3)

Advanced Automated Support (12)

Advanced Reporting (3)

Post DP 3 Functionality (1+)

Advanced Admin & Reporting (11)

Baseline Entitled Process Software

Alpha 1 Software Release (2 Use Cases)

Alpha 2 Software Release (12 Use Cases)

Beta Software Release (18 Use Cases)

Legend
Alpha 1 = A
Alpha 2 = A
Beta = A
Future = A

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Use Case Detailed Venn Diagram

Future Enhancements to Entitled Process Software

- TA Determination Tool
- AFOM Decision Tool
- Handle Conjunctive Alterations
- CBA Calculation Tool
- Handle Trade Off Funding
- Modify Ship Change (Post DP 3)
- Modify Funding Level (budget line up/down)
- Raise for Vote
- Expert Level SCD Search
- Display Dashboard
- Auto Notification of Action
- Handle Capability Alteration
- Advanced Admin & Reporting (14)
- Auto Populate FMP
- Rework
- Request Ship Change Withdrawal
- Adjudicate Funding

Baseline Entitled Process Software

- Login
- Perform AFOM
- Admin & Reporting (10)
- Initiate Idea
- Assign Responsibility
- Finalize Assessment
- Endorse Funding Line
- Review CBA
- Prioritize FMP
- Tally Vote
- Endorse Ship Change
- Vote on Change
- Develop Ship Change
- Perform Technical Assessment
- Refactor Funding
- Find Ship Change
- View Ship Change
- Edit Ship Change
- Complete Review
- Calculate Secondary Voting Options
- Linked Ship Change
- Reclama
- Archive SCD
- Notification of Action

Legend
- Alpha 1 = (green A)
- Alpha 2 = (orange A)
- Beta = (gray A)
- Future = (white A)

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Entitled Process Activity Use Cases

Entitled Process Activities (left table)

Use Case Name	% Complete	Alpha 1	Alpha 2	Beta & BL	Future
Vote on Change	80	Yes			
Tally Vote	80	Yes			
Calculate Secondary Voting Options	80	Yes			
Initiate idea	30		Yes		
Endorse Ship Change	30		Yes		
Assign Responsibility	30		Yes		
Perform Technical Assessment	30		Yes		
Complete Review	5		Yes		
Develop Ship Change	30		Yes		
View Ship Change	30		Yes		
Edit Ship Change	30		Yes		
Find Ship Change	30		Yes		
Perform AFOM	60		Yes		
Perform CBA	60		Yes		
Endorse Funding Line	60			Yes	
Archive SCD	30			Yes	
Reclama	10			Yes	
Refactor Funding	5			Yes	
Linked SCD	5			Yes	
Notification of Action (Manual ID)	10			Yes	
Login	5			Yes	
Finalize Assessment	5			Yes	
Prioritize Fleet Modernization Plan	5			Yes	

Entitled Process Activities (right table)

Use Case Name	% Complete	Alpha 1	Alpha 2	Beta & BL	Future
TA Determination Tool	5				Yes
Expert Level SCD Search	5				Yes
AFOM Decision Tool	5				Yes
CBA Calculation Tool	5				Yes
Handle Conjunctive Alterations	10				Yes
Handle Trade Off Funding	5				Yes
Modify Ship Change (Post DP 3)	5				Yes
Rework	5				Yes
Handle Capability Alteration	5				Yes
Modify Funding Level (budget up/down)	5				Yes
Adjudicate Funding	5				Yes
Raise for Vote	5				Yes
Auto Notification of Action	10				Yes
Request Ship Change Withdrawal	30				Yes
Automatic Populate FMP	5				Yes
Display Dashboard	5				Yes

Color Code and Release Key

Color Code and Release Key
Part of Alpha 1 Release
Part of Alpha 2 Release
Part of Beta Release
Part of Future Release

% Complete Key

%	Definition
5	Proposed Use Case, title defined, no detail
10	Proposed Use Case, identified and high level defined
30	Proposed Use Case, SME input obtained, basic course detailed
60	Proposed Use Case, detailed, ready for internal review
80	Accepted Use Case, SME Review complete, ready for stakeholder review
100	Accepted Use Case, associated design model complete

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Admin & Reporting Use Cases

	Use Case Name	% Complete	Alpha 1	Alpha 2	Beta/BL	Future
Administrative Activities	Administrator Adjust SCD	5		Yes		
	Assign Voting Board Members (Note 1 and 2)	10			Yes	
	Define Voting Board	10			Yes	
	Implement Pick Lists	10			Yes	
	Generate Pick Lists	5			Yes	
	Set AFOM Weights	10			Yes	
	Adjust User Preferences	5				Yes
	Manage Users (Note 1)	10				Yes
	Administrator Comment SCD	10				Yes
	Archive Inactive Ship Changes	5				Yes
	Assign Individual to Billet (Note 2)	10				Yes
	Define Assistant	5				Yes
	Define Billet (Note 2)	5				Yes
	Define Metric Alert	10				Yes
	Modify Step Definition	5				Yes
	Modify Time Window Definitions	5				Yes
	View User Assignments	5				Yes
Reporting	Create Ad Hoc Report	10			Yes	
	Save Ad Hoc Report	5			Yes	
	Generate Modernization Plan Report	10			Yes	
	Generate Weekly Statistics Report	5			Yes	
	Generate Monthly Statistics Report	5				Yes
	Generate Non-Voting Metric Report	5				Yes
	Generate Yearly Statistics Report	5				Yes

% Complete Key

%	Definition
5	Proposed Use Case, title defined, no detail
10	Proposed Use Case, identified and high level defined
30	Proposed Use Case, SME input obtained, basic course detailed
60	Proposed Use Case, detailed, ready for internal review
80	Accepted Use Case, SME Review complete, ready for stakeholder review
100	Accepted Use Case, associated design model complete

Color Code and Release Key

Part of Alpha 1 Release
Part of Alpha 2 Release
Part of Beta Release
Part of Future Release

Note: "Administrator Adjust SCD" and "Create Ad Hoc Report" Use Case functionality will be used to implement future automation opportunities within the Baseline software.

Software Development

	Metric	Inception Phase	Current Value	Elaboration Phase	Construction Phase	Transition Phase
Requirements	Number of Use Cases	13	32/2	32/14	32/32	32/32
	Number of Supplemental Requirements	59	77	65	70	80
	Changed Requirements Percentage	NA	0%	75	50	10
	Use Case Completeness	NA	6%	40%	80%	100%
	Supplemental Requirement Completeness	NA	25%	50%	80%	100%
Design	Number of Classes	0	43	20	30	40
	Number of Operations	0	210	100	150	200
	Design Completeness	0%	6%	40%	90%	100%
	Implementation Completeness	0%	0%	30%	80%	100%
Testing	Number of Test Cases	0	19	150	200	250
	Number of New Defects	0	0	70	45	20
	Number of Defects Resolved	0	0	30	50	55
	System Completeness (Test Pass)	0%	0%	40%	80%	100%
Cost (Actual vs Projected)	See Actual and Projected Cost vs. Time graph					

Note: Number of Use Cases indicates the total number of Use Cases identified to be a part of the Baseline Entitled Process Software. The second number of Use Cases indicates the number of Use Cases that is currently fully populated (i.e. 32 Uses Cases will be part of the Baseline and 2 Uses Cases are currently populated or 32/2).
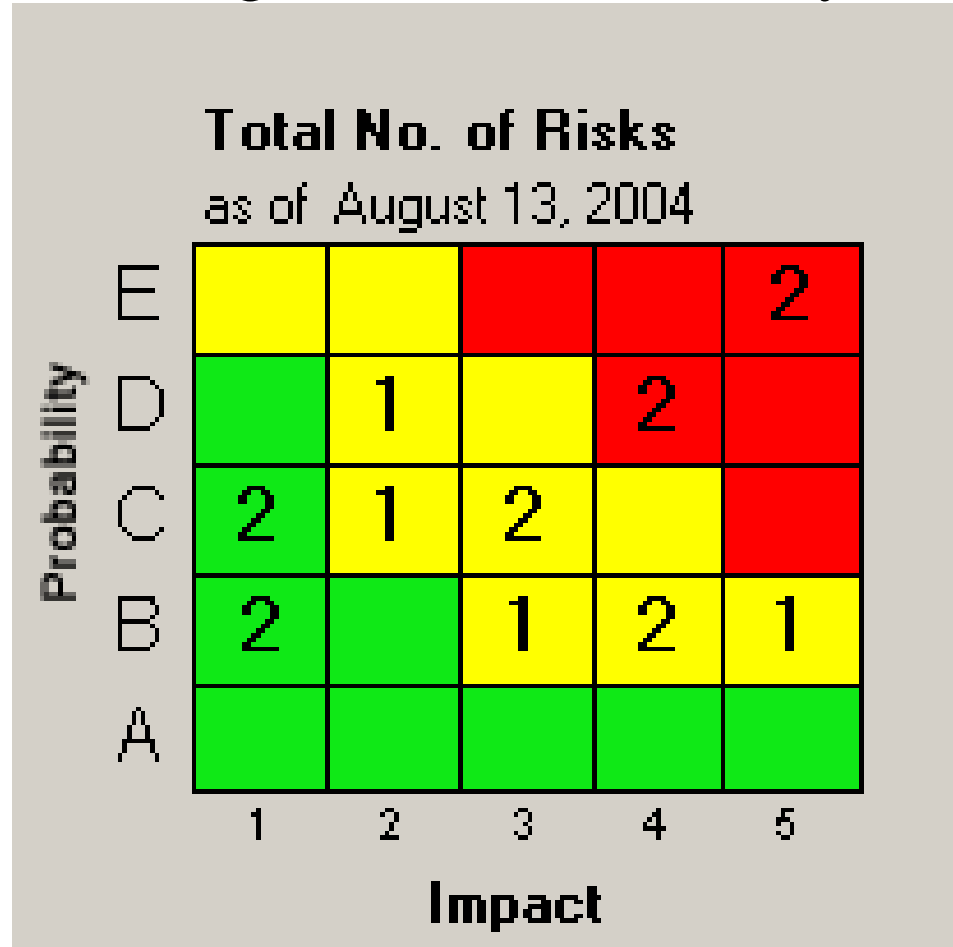
Software Development

- All identified risks

Title	Probability	Impact	Level
Requirements creep	E	5	H
Extended use of the Manual Entitled process	E	5	H
Classified software development	D	4	H
Incomplete business model and rules	D	4	H
Mixing new development & SW Maintenance at NSLC	C	3	M
Financial management-related requirements	B	5	M
AFOM Model practicality	C	3	M
Weak overall line of project authority	D	2	M
AFOM model accuracy	B	4	M
RUP and IBM Rational tools unfamiliarity	B	4	M
Intro of new COTS/GOTS to production environment	C	2	M
Data communications capacity	B	3	M
Resistance to business process change	C	1	L
Reviews not realized on time	C	1	L
Distributed team	B	1	L
NDE production environment	B	1	L

Software Development

- The following Risks are currently being managed

Software Development

- **Entitled Process Definition**
  - Need to establish baseline and configuration control on Business Rules
    - Collected e-mail and other documented change requests to Interim SCD
    - BRTs establishing "rules" outside Business Rule "Baseline" – Need to obtain BRT Outbriefs
  - Need to define all Business Rules which drive software to be developed
  - Need to promptly adjudicate Business Rule Issues – SMEs are working to do so
  - Need to validate automation estimates comply with Stakeholders' expectations
    - SCD Submitter "will" check if SCD could be re-submitted or combined with current SCD – How much automation?
    - Specific Use Cases to be defined
    - Degrees of Automation by Business Rule activity
- **Resources**
  - Current Resources sufficient to provide robust architecture and baseline functionality
- **Funding to Complete**
  - Funding provided or in process
  - Additional funding requirements dependent upon potential functionality requirements
- **Risks**
  - Requirements Creep
  - Incomplete business model and rules
  - Extended use of Entitled process
  - Classified software development

Software Development

- **Critical Path**
  - **Entitled Process Definition**
    - Still in flux, coming into better focus and under configuration control but still not there
  - **Inception Phase Product Completion / Acceptance**
    - Delivered on August 13, Inception Phase products are approved
  - **Elaboration Phase Product Completion / Acceptance Iteration 1 (Iteration 2)**
    - Need overall SHIPMAIN, Entitled Process, and software Scope defined
    - Elaboration Phase activities have begun
    - Elaboration Phase activities may be re-directed based on functionality requirements
  - **Construction Phase Product Completion / Acceptance Iteration 3 (Iteration 4)**
   - None
  - **Transition Phase Product Completion / Acceptance - General Availability Release**
    - None

Software Development

- **Critical Path (cont) - Risk Mitigation**
  - **Requirements Creep**
    - Requirements Management ensures change impact understood prior including in scope.
      - » Process plan approved, methods are being used
    - Use CM Process
      - » Process approved, methods in use, baselines are established
  - **Extended use of Entitled process**
    - Deliver incremental functionality with multiple releases allowing manual process transition.
      - » Part of Software Development Plan
    - Leverage Interim SCD module
      - » Surveying current assets to determine re-use and lessons learned opportunities
      - » Software re-use identified
      - » Architecture constructs re-use
  - **Incomplete business model and rules**
    - Clearly define Scope of software development and determine iterative software development approach. Then provide appropriate funding and schedule to meet development approach.
      - » Business Rule definitions and issue adjudication are progressing, although slowly
      - » Funding decisions may be needed to accommodate scope and functionality decisions
  - **Classified software development**
    - Follow DITSCAP development processes in each phase
      - » In software development process
    - Develop software architecture to accommodate classified and unclassified FMP elements.
      - » Classification included as software "Feature"
    - Determine classification implications and include in Software Development Plan
      - » Plan complete and approved, currently investigating classification implications

Entitled Process Cost - Total

Entitled Process Total Actual vs Projected Costs
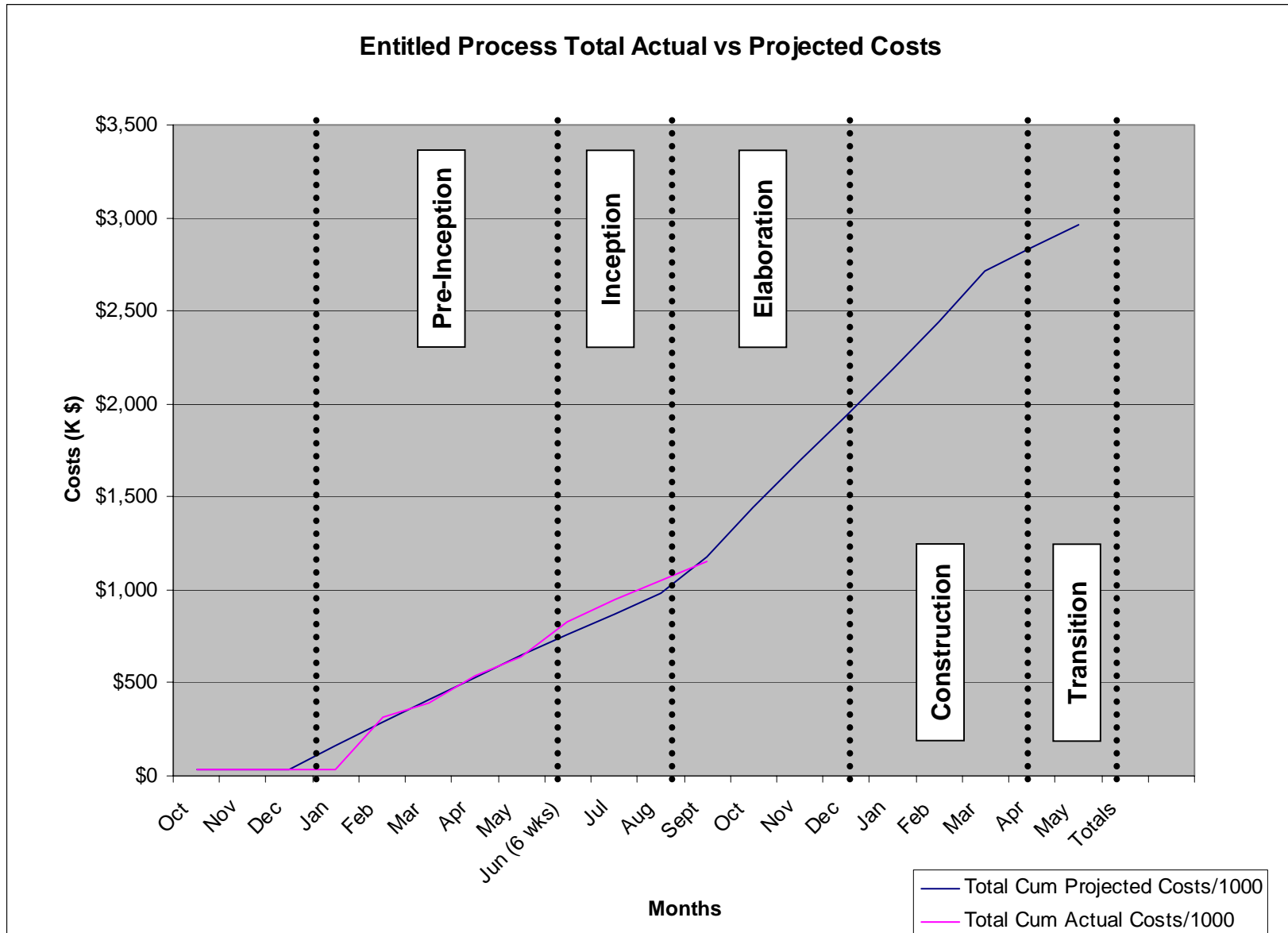
NDE-NM Entitled Process Summary

Functional Area   **Level of Confidence**

- **Short Term Entitled Process**
  - **Ship Change Document**
  - Release 1.1   July 22, 2004   Complete
  - Release 1.2   August 26, 2004   Complete
  - Release 1.3   Sept 3, 2004   Complete
  - Release 1.4   Oct 10, 2004   HIGH
- **Short Term Entitled Process**
  - **Secure NDE-NM Environment**
  - Operational   Nov 26, 2004   MEDIUM
  - Secure AMPS – NITRA (2-way)   Oct 29, 2004   MEDIUM
  - TAMS Interface   Nov 26, 2004   MEDIUM
- **Long Term Entitled Process**
  - **Software Development**
  - Inception Phase   Sept 1, 2004   Complete & Approved
  - Elaboration Phase   March 20, 2005   MEDIUM
  - Construction Phase   May 27, 2005   MEDIUM
  - Transition phase   June 10, 2005   MEDIUM

NDE NM Entitled Process Action Items

NAVY DATA ENVIRONMENT- NAVY MODERNIZATION (NDE-NM) PROGRAM REVIEW MEETING ACTION ITEMS,

W3's from 13 Sep 2004:   What, Who, & When (W3's)

No.	What:	Who:	When:	Status Report
3-1a.	Provide comments on the draft Barrier Removal Team charter to Mr. Douglas.	All	9/17/04	
3-1b.	Provide copies of the draft Barrier Removal Team charter to SPAWAR and PEO C4I Reps.	Mr. Douglas	9/13/04	Complete. The Charter went out to SPAWAR C4I.
3-2.	Get the interface documentation for Cross Domain Capability- Auto Info. Transfer	Mr. Turner	10/13/04	In progress. Expected completion date is 15 Oct 04.
3-3	Provide a list of the completed Use Cases.	Mr. Mick	10/13/04	Complete and part of October PR Brief
3-4	Provide clarification of impact on the cost/schedule for development of additional use cases, above the 5 originally planned. Identify which use cases are part of baseline functionality.	Mr. Mick	10/13/04	Complete and part of October PR Brief

W3's 14 July 2004

No.	What	Who	When	Status Report
2-1	Resolve discrepancies identified in the Functional Allocation brief to cement PEO C4I commitment to fund the balance. Working group to be identified and led by Mr. Douglas to determine: 1) specific data elements to be captured; 2) what is the authoritative source for these data elements; 3) where will these data elements be stored.	Mr. Douglas	TBD	

W3's 27 May 2004

No.	What	Who	When	Status Report
1-1	Reach agreement on authoritative database (NDE) including transition plan	Mr. Haney	01 Oct 04	Complete. Agreement reached on authoritative database, NDE.